

[NAME OF DOCUMENT] CLAIMS

[Claim 1]

An optical recording disc constituted so as to enable recording and reproduction of data by irradiation with a laser beam, the optical recording disc comprising a laminated body formed by laminating a decomposition reaction layer containing noble metal oxide as a primary component and a light absorbing layer so as to sandwich at least a dielectric layer and being constituted so that when it is irradiated with the laser beam, a bubble pit is formed in the decomposition reaction layer and fine particles of the noble metal precipitate into the bubble pit, thereby forming a recording mark in the decomposition reaction layer, the fine particles of the noble metal having a particle diameter of 2 nm to 15 nm.

[Claim 2]

An optical recording disc in accordance with Claim 1, wherein the noble metal oxide contained in the decomposition reaction layer as a primary component is decomposed into a noble metal and oxygen when the decomposition reaction layer is irradiated with the laser beam.

[Claim 3]

An optical recording disc in accordance with Claim 2, wherein the noble metal oxide is platinum oxide and the platinum oxide is decomposed into platinum and oxygen when the decomposition reaction layer is irradiated with the laser beam via the light transmission layer.

[Claim 4]

An optical recording disc in accordance with Claim 2 or 3, wherein

the bubble pit is formed by an oxygen gas produced when the optical recording disc is irradiated with the laser beam.

[Claim 5]

5           An optical recording disc in accordance with Claim 1, wherein the light absorption layer contains at least one of Sb and Te.

[Claim 6]

10           An optical recording disc in accordance with Claim 1, wherein the dielectric layer and the light absorption layer are deformed when the optical recording disc is irradiated with the laser beam.

[Claim 7]

15           An optical recording disc in accordance with Claim 2, wherein the dielectric layer and the light absorption layer are deformed when the bubble pit is formed in the decomposition reaction layer.

[Claim 8]

20           An optical recording disc in accordance with Claim 3, wherein the dielectric layer and the light absorption layer are deformed when the bubble pit is formed in the decomposition reaction layer.

[Claim 9]

25           An optical recording disc in accordance with Claim 4, wherein the dielectric layer and the light absorption layer are deformed when the bubble pit is formed in the decomposition reaction layer.

[Claim 10]

An optical recording disc in accordance with Claim 5, wherein the dielectric layer and the light absorption layer are deformed when the bubble pit is formed in the decomposition reaction layer.